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Session

S30

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S30 Underwater geoarchaeology: an interdisciplinary field bridging marine geosciences and underwater archaeology

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We envision a special session which will provide the opportunity for marine geoscientists and engineers to present the significance and the effectiveness of marine geo-scientific methodology, techniques and marine technology in the discovery, mapping and investigation of shallow- or deepwater archaeological sites. We also invite underwater archaeologists to present results and set standards and requirements to be met when marine geoscience and technology is used for underwater archaeological studies. The aim of this session is to promote mutual understanding between archaeologists and natural scientists, like marine geoscientists and technologists about appropriate methods of investigation and a wider recognition of the need for true interdisciplinary integration under the theme of underwater geoarchaeology. Swath bathymetry, side scan sonar, subbottom profiling, magnetometry, photomosaicing along with the use of human occupied (HOV) or remotely operated (ROV) or autonomous underwater vehicles (AUV) are techniques which have been used for the investigation of archaeological artefacts on the shallow or deep seafloor. Nevertheless, little discussion has taken place on the limitations of these techniques when applied for underwater archaeological studies. We encourage the submission of papers highlighting the role and the limitations of marine geo-scientific methodology and techniques and marine technology in the discovery, mapping and investigation of ancient shipwrecks, submerged settlements and constructions and submerged historic and prehistoric landscapes. Very much welcome are papers which will attempt to explain and/or reconstruct geological processes, like sea-level change, tectonic movements and earthquakes, sedimentation and landslides, affecting the evolution, destruction and site formation of submerged archaeological sites.